

My Bag

Preparation Time:	Easy-to-do	Moderate	Extensive
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Grade:	2 – 3
Focus:	Recycling
Subject:	Science, Math
Materials:	Four pounds of clean trash (include items that can be recycled, reused, repaired and composted – also have items that can only go in the landfill), five clean plastic or paper bags, scale (kitchen or bath)
Teaching Time:	30 to 45 minutes
Vocabulary:	Recycling, trash, reduce, reuse, estimate, compost

more information on the makeup of South Carolina's MSW stream, see the Lesson Resources.

Learning Procedure

1. Show the students the bag of trash you have prepared and ask them to **estimate** its weight. Call on several students to estimate from just looking at the bag and then from holding the bag. Weigh the bag. If using a bath scale, weigh the person with the trash bag and weigh the person without the trash bag. Then subtract to obtain the weight of the trash bag. Your answer should be very close to four pounds. Tell students that this is how much trash each one of us generates each day. Students may find this unbelievable. Remind them that this figure includes trash from all of their meals, classroom waste, etc. It is just the MSW that we make. It does not include any of the waste from business and industry.
2. Make five cards marked: recycle, reuse, repair, compost and landfill/incinerator. Tape these cards onto the five bags. Discuss what these words mean. Find out and discuss with the class what is recyclable in your community.
3. Have the students open the trash bag and tell what each item is used for and why it was purchased. Discuss if the product was necessary or not. Now that the item is trash, was it worth buying the product in the first place? Remind students that we can reduce the amount of trash we throw out by only buying what we need.
4. Have students divide the contents of the trash bag into the proper categories — recycle, reuse, repair, compost and landfill/incinerate.
5. After classifying, re-weigh the items in the landfill category and discuss how much trash was saved from the landfill/incinerator.

Learning Objectives

Students will:

- identify trash as recyclable, reusable, repairable and compostable; and
- show the principle of waste reduction.

Background

What you call **trash** or garbage, professionals call solid waste. There are different kinds of solid waste. Municipal solid waste (MSW) is the combined residential, commercial and institutional waste we make. MSW, in short, is the garbage we make in our homes and schools. We make a lot of MSW – we throw away more than four pounds per person per day. Through **recycling** or **reuse**, much of this waste can be removed from the MSW stream and not disposed of in our landfills or incinerators.

In this activity, students look into a typical bag of household trash and decide which items can be recycled, reused, repaired and compostable as well as that ones that must be thrown away. For

Extension Activities

1. Older children may play a recycling relay race. Divide the class into teams. Each child picks an object from a bag of mixed clean trash and delivers it to a box or bag labeled recycle, repair, reuse and compost. Each student must justify their decision.
2. Use a bag of clean, mixed trash, hand one trash object to each student and have all students stand together in a group representing the waste stream. The teacher can be the trash collector who will take the trash away to a landfill, one item at a time. Tell students that, at a landfill, they will be put into a specially lined hole in the ground and covered with soil. They will remain there forever. It's dark, damp and there is no light or air, so no trash decomposes. Ask if anyone wants to go to the landfill. If they don't want to go and want to reuse the resource, have them think of a way the item can be reused or recycled. Try to keep items out of the landfill by thinking of alternatives. Discuss ways to change the items that cannot be recycled or reused. Continue until all the students/trash items have been rescued from the landfill.
3. Have students (and teacher, too) tie a plastic bag to their waists. Each student is to place in the bag all the waste from the class, clean and dry lunch waste and any other waste each student is responsible for making. Compare the amounts at the end of the day or week. You could try this both before and after this lesson to demonstrate how the students' habits may change.
4. As a math exercise, create a chart graphing the weight of the five bags after the four pounds of trash has been sorted into recycle, repair, reuse, compost and landfill/incinerate.
5. Have students complete the handout "If Bagging Trash is Your Game, This Match is for You."

Name: _____

If Bagging Trash is Your Game, This Match is for You.

Match each word on the left with the phrase that best describes it.

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| _____ Trash | A. To find a new use for something instead of throwing it away. |
| _____ Litter | B. A recyclable material made from trees. |
| _____ Reuse | C. To buy less and to throw away less trash. |
| _____ Natural Resources | D. Leaves and grass clippings that are broken down by natural forces and can be used on gardens. |
| _____ Landfill | E. Our garbage, all the things we throw away. |
| _____ Recycling | F. Trash that is in the wrong place, such as on the ground or in the street. |
| _____ Paper | G. A process that makes something new out of something old. |
| _____ Reduce | H. A special place where trash is buried. |
| _____ Compost | I. Things that are found in nature that we must have to live. |

